This month's cover was created by Bonnie Pelnar, an artist with Genigraphics Corporation's Orange County, California, Service Center. Genigraphics supplies computer graphics production facilities and consulting services for a variety of customers out of its 23 service centers, which are spread around the country. While much of their business is in presentation graphics for business, they are also called on to do covers for magazines and other highly creative assignments.

The graphic on the cover, however, was not even a business assignment. The artist, Bonnie Pelnar, wanted to create a Christmas present for her father, who collects antique and classic cars. She got the original idea from a photograph of a 1937 Nash. Before working on the Genigraphics console, Pelnar was an airbrush illustrator, and she wanted to achieve an airbrushed effect in many parts of the illustration. To do this, she used a lot of space-coloring, a feature of the Genigraphics console, and a "glow" technique in imaging. For this latter process, the white pieces are put on separately, imaged as a second exposure through a piece of mylar.

Pelnar first digitized the car into the system from the black and white photograph. She did the fender, tire, hood, each of the major basic shapes, one at a time. Then she worked on each one detail by detail. Once the car was created, she changed the background several times and ended up with a few different versions. The image used on this cover was shot on the PS2000 film recorder, which comes with the SG2000 Genigraphics console.

On these pages you see other graphics from Genigraphics artists. Figure 1 was a cover for Software News magazine. The artist, Thomas Gilhooly, tried to give the impression of intense heat along with a smooth-flowing, liquid metal pouring out of the ladle. The artist used the new Extended Art software upgrade on a Genigraphics 100V, so he was able to achieve the desired effect through excessive use of color. By exposing a red glow behind the crucible on a PS4000 Film Recorder, the effect of radiating heat was created. This required nearly 500 colors. Then the flowing gold was hand drawn, using Digisketch. Finally the original was duplicated, sized, and colored. All these functions are automatic and part of the 100/Extended Art software.

The "Woman in a Globe" in Figure 2 was also designed by Thomas Gilhooly, a visualizer with Marketing Services at Genigraphics. The intent of the design was to achieve the effect of a human image as seen through a fluid-filled globe. The distortions and reflections were achieved through the use of color. The monochromatic scheme was especially effective in creating the desired illusion. The Genigraphics 100 Series console, in this case the 100C, allows the artist to choose a color, such as the green used here, and by changing the color’s value and the measurements of chroma, create hundreds of different shades.

A problem encountered in making the "Woman in a Globe" was one of softening specific lines in the woman's face. The basic face was drawn using Genigraphics Digisketch software. Once complete, it would normally be difficult to reproduce just specific portions of the face to size-increment and color for soft shadows. Digisketch offers a retrace function that allowed Gilhooly to recreate only those portions of the image that were required to create the softening shadows and reflections needed.

The cup and ball graphic shown in Figure 3 is a combination of simple two-dimensional and three-dimensional images. The graphic was created on a Genigraphics 100C console, which is basically a 2-D system. The illusion was created with color. The image of the cup is a horizontally distorted sector, duplicated many times, then size-incremented. This is an automatic console function, which allows the artist to create a series of objects in a group, enlarge one of the objects, reduce another, generally the last, then incrementally change the sizes of all the objects in between.
Once the size increment has been completed, the objects are colored to give the illusion of dimension. This is done with the system’s space-color feature, a function similar to the size-increment feature. It incrementally averages the color from the first to the last.

The illusion of the tipped cup was achieved by placing a series of size-incremented and space-colored ellipses on top of the cup. The artist has complete control of the overlay of objects on a Genigraphics 100 series console. A similar version of the cups and balls appeared on the cover of VAX, RSTS Professional magazine, in August 1984. This graphic was also created by Thomas Gilhooly.

Figures 4, 5, and 6 are visuals created by various Genigraphics artists over the years. All of them were done on Genigraphics consoles.